

Wildlife Bureau Survey Note

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2012-13 Small Game Harvest Results

A random survey of licensed hunters was conducted following the 2012 small game season to determine the size and distribution of Iowa's small game harvest (Figure 1). Survey questionnaires were mailed to 8,315 license holders. Survey participants were asked which species they hunted, how many days they hunted, and how many of each species they harvested. Survey participants returned 3,275 usable questionnaires for a response rate of 39%. The DNR sold 207,884 unique hunting licenses in 2012-13. Based on survey responses an estimated 62,192 license holder's hunted small game (pheasant, quail, partridge, cottontail, or squirrel). This is a 5% increase in small game hunters compared to the year before.

By residency, the number of resident small game hunters increased 6%, from 52,507 in 2011 to 55,710 in 2012, while the number nonresident small game hunters fell 8% from 7,079 in 2011 to 6,482 in 2012. Pheasant were the most commonly reported species hunted by small game hunters (76%), while squirrels where the second most sought after species with 35% of small game hunters indicating they hunted squirrels (Table 1).

Hunters from 44 different states visited Iowa last fall to hunt. Over 52% of Iowa's nonresident hunters came from 4 states, Minnesota, Wisconsin, Michigan, and Illinois in that order. The typical small game hunter reported hunting a little over 8 days last fall.

Ring-necked Pheasant. - An estimated 47,180 pheasant hunters (23% of licensed hunters, 76% of small game hunters) took to Iowa's fields last fall and harvested 158,099 roosters (Table 1 & 2). The number of pheasant hunters increased 3%, while total harvest increased 45% compared to 2011 estimates. Roadside counts showed populations increased 18% compared to 2011, so the increase in hunters and harvest was expected. An estimated 5,742 nonresident hunters contributed to Iowa's total estimate of pheasant hunters. Iowa's peak year for nonresident pheasant hunters was 1997 with 50,349. Resident hunter numbers increased 5% while the number of nonresident pheasant hunters declined -11% (Table 3). This is the first increase in pheasant hunters since 2005.

Resident hunters hunted an average of 6.3 days last fall and harvested 3 birds during the season. Nonresident pheasant hunters averaged 4.3 days afield and harvested 4 birds for the season (Table 3). Hunter success (harvest/day) was highest through the first 2 weekends of the season (Table 4). Approximately 38% of the total pheasant harvest occurred in the first 9 days of the 2012 season (Table 4). Fifty-six percent of pheasant hunters reported hunting 4 days or less. Resident hunters accounted for 87% of the total pheasant harvest.

The improved winter and spring weather conditions in 2012, as predicted, led to the first increase in pheasant harvest since 2005. The pheasant harvest estimate however, remains -70% below the 10-year average, and -86% below the historic average harvest of 1.1 million roosters. Unfortunately Iowa's weather pattern for 2013 returned to a snowy winter and a wet and cold spring, thus it does not appear the population will continue the rebound in 2013.

Bobwhite Quail. - Approximately 8,769 quail hunters (4% of licensed hunters, 14% of small game hunters) harvested 20,474 quail during the 2012 quail season (Table 1 & 2). Hunter

numbers declined -7% while harvest improved significantly compared to 2011 estimates. Quail hunters averaged 5 days a field and harvested 2 birds for the season (Table 3). Fifty-five percent of the quail harvest occurred in the first month of the 2012 season (Table 4). Sixty-two percent of quail hunters hunted 4 days or less. Resident quail hunters accounted for 95% of the total quail harvest. Roadside counts showed quail numbers had increased 63% over 2011 estimates, thus the improved hunter harvest was expected.

Table 1. Estimated proportion of eligible 2012 license buyers (those who bought a hunting license) and proportion (who indicated they hunted small game) by species.

Species	Eligible Hunters	Small Game Hunters
Pheasants	22.7%	75.9%
Quail	4.2%	14.1%
Cottontail	8.8%	29.3%
Squirrels	10.4%	34.9%
Partridge	0.7%	2.4%
Mourning Dove	4.5%	15.0%

Note: Most Iowa hunters are required to have a general hunting license (deer, turkey, waterfowl, etc.) even though they do not intend to hunt small game.

Figure 1. Small game survey card.

2012-2013 Iowa Small Game Hunter Survey

Please report only YOUR SMALL GAME hunting IN IOWA. If you did not hunt small game in Iowa, please answer "No" to the first question and return this card.

Please respond only in the spaces provided.

Did you hunt SMALL GAME in IOWA during 2012-13? ☐ Yes ☐ No

Total number of days hunted in IOWA (for small game only):

Please report season totals AND period totals for pheasants and quail :

NOTE: the period totals must add up to equal the season total.

	Wild Pheasants (not game farm)				Wild Quail (not game farm)				
	SEASON TOTAL	Oct 27 to Nov 4	Nov 5-30	Dec 1 to Jan 10	SEASON TOTAL	Oct 27 to Nov 4	Nov 5-30	Dec 1 to Jan 10	Jan 11-31
Number YOU Harvested	 	 	 	 	 	 	 	 	
Number of Days Hunted	 	 	 	 	 	 	 	 	

Please report season totals for each species below:

	Cottontail Rabbit	Squirrel	Hungarian Partridge	Dove
Number YOU Harvested	 	 	 	
Number of Days Hunted	 	 	 	

Did you hunt during the 2012 Youth Pheasant Season? ☐ Yes ☐ No

If YES, how many youths hunted with you and how many pheasants were harvested?

 Youths Wild Pheasants Harvested

DO NOT make unnecessary marks on this form.

Machine-scanned form, please print neatly using blue or black ballpoint pen only.

Table 2. Estimated small game hunters, harvest, effort by species and license type for the 2012-13 small game season.

	Hunters		Harvest		Days	
License/Species	estimate	95% CI	estimate	95% CI	estimate	95% CI
ALL LICENSE TYPES						
Pheasant	47,180	± 4,225	158,099	± 27,618	286,375	± 39,847
Quail	8,769	± 2,094	20,474	± 14,299	43,343	± 13,664
Cottontail Rabbit	18,247	± 2,960	70,003	± 18,747	81,105	± 20,427
Squirrel	21,698	± 3,196	158,615	± 40,656	124,814	± 34,018
Hungarian Partridge	1,481	± 811	611	± 480	11,321	± 11,230
Jackrabbit		±		±		±
Mourning Dove	9,328	± 2,170	94,864	± 32,597	29,018	± 7,541
			Total Days ^a		481,223	
RESIDENT HUNTERS						
Pheasant	41,437	± 4,104	137,215	± 27,154	261,828	± 39,574
Quail	7,947	± 2,045	19,420	± 14,272	40,922	± 13,601
Cottontail Rabbit	17,537	± 2,922	67,720	± 18,588	79,031	± 20,359
Squirrel	20,519	± 3,123	147,295	± 39,190	120,662	± 33,843
Hungarian Partridge	1,349	± 806	460	± 433	10,991	± 11,227
Jackrabbit		±		±		±
Mourning Dove	9,244	± 2,169	93,799	± 32,561	28,747	± 7,537
			Total Days		441,595	
NONRESIDENT HUNTERS						
Pheasant	5,743	± 1,003	20,884	± 5,039	24,547	± 4,645
Quail	822	± 450	1,054	± 875	2,421	± 1,309
Cottontail Rabbit	710	± 473	2,283	± 2,436	2,074	± 1,680
Squirrel	1,179	± 679	11,320	± 10,825	4,152	± 3,434
Hungarian Partridge	132	± 90	151	± 207	330	± 264
Jackrabbit		± 0		± 0		± 0
Mourning Dove	84	± 72	1065	± 1,534	271	± 247
			Total Days		39,628	

^a Total days does not include mourning dove days of hunting.

Estimated number of people who hunted (pheasant, quail, partridge, cottontail, and squirrels):

62,192 ± 4,628

Estimated number of people who hunted upland game birds only (pheasant, quail, partridge) :

35,088 ± 3,800

Estimated number of people who hunted small game mammals only (cottontail, squirrel):

14,685 ± 2,722

Youth Pheasant Season

2,135 ± 1,023 Adult Hunters
 2,821 ± 1,419 Youths Hunted
 972 ± 876 Harvest

Table 3. Estimated number of small game hunters, harvest, and days hunted, by license type, species, and year, in Iowa during in Iowa during the 2011-12 and 2012-13 small game seasons.

SPECIES	N	LICENSE TYPE								
		ALL LICENSE TYPES			RESIDENT			NONRESIDENT		
		2011	2012	%CHG	2011	2012	%CHG	2011	2012	%CHG
Ring-necked pheasant	836									
Hunters		45,975	47,180	3%	39,515	41,437	5%	6,460	5,743	-11%
Harvest		108,905	158,099	45%	75,897	137,215	81%	33,008	20,884	-37%
Days		249,922	286,375	15%	219,515	261,828	19%	30,407	24,547	-19%
Harvest/hunter		2.4	3.4	41%	1.9	3.3	72%	5.1	3.6	-29%
Days/hunter		5.4	6.1	12%	5.6	6.3	14%	4.7	4.3	-9%
Harvest/day		0.4	0.6	25%	0.4	0.5	49%	1.1	0.9	-22%
Bobwhite quail	159 ^a									
Hunters		9,436	8,769	-7%	8,574	7,947	-7%	862	822	-5%
Harvest		4,539	20,474	351%	3,664	19,420	430%	875	1,054	20%
Days		55,114	43,343	-21%	51,577	40,922	-21%	3,537	2,421	-32%
Harvest/hunter		0.5	2.3	385%	0.4	2.4	467%	1.0	1.3	25%
Days/hunter		5.8	4.9	-15%	6.0	5.2	-14%	4.1	3.0	-28%
Harvest/day		0.1	0.5	488%	0.1	0.5	571%	0.3	0.4	76%
Cottontail rabbit	312									
Hunters		17,197	18,247	6%	16,999	17,537	3%	198	710	259%
Harvest		51,815	70,003	35%	51,260	67,720	32%	555	2,283	311%
Days		104,457	81,105	-22%	103,541	79,031	-24%	916	2,074	126%
Harvest/hunter		3.0	3.8	28%	3.0	3.9	28%	2.8	3.2	15%
Days/hunter		6.1	4.4	-27%	6.1	4.5	-26%	4.6	2.9	-37%
Harvest/day		0.5	0.9	72%	0.5	0.9	72%	0.6	1.1	80%
Squirrel	357									
Hunters		20,420	21,698	6%	19,713	20,519	4%	707	1,179	67%
Harvest		108,783	158,615	46%	100,246	147,295	47%	8,537	11,320	33%
Days		119,802	124,814	4%	116,138	120,662	4%	3,664	4,152	13%
Harvest/hunter		5.3	7.3	37%	5.1	7.2	41%	12.1	9.6	-20%
Days/hunter		5.9	5.8	-2%	5.9	5.9	0%	5.2	3.5	-32%
Harvest/day		0.9	1.3	40%	0.9	1.2	42%	2.3	2.7	17%
Hungarian partridge	36 ^a									
Hunters		1,782	1,481	-17%	1,687	1,349	-20%	95	132	39%
Harvest		1,046	611	-42%	1,046	460	-56%	0	151	
Days		13,325	11,321	-15%	12,879	10,991	-15%	446	330	-26%
Harvest/hunter		0.6	0.4	-31%	0.6	0.3	-45%	0.0	1.1	
Days/hunter		7.5	7.6	2%	7.6	8.2	7%	4.7	2.5	-47%
Harvest/day		0.1	0.1	-38%	0.1	0.0	-50%	0.0	0.5	
Mourning Dove	153 ^a									
Hunters		8,780	9,328	6%	8,667	9,244	7%	113	84	-26%
Harvest		57,285	94,864	66%	56,643	93,799	66%	642	1,065	66%
Days		45,603	29,018	-36%	45,107	28,747	-36%	496	271	-45%
Harvest/hunter		6.5	10.2	56%	6.5	10.2	55%	5.7	12.7	123%
Days/hunter		5.2	3.1	-40%	5.2	3.1	-40%	4.4	3.2	-26%
Harvest/day		1.3	3.3	160%	1.3	3.3	159%	1.3	3.9	205%

a - Small sample response, view estimates accordingly.

Table 4. Mean hunting effort and harvest by time period for pheasant and quail hunters during the 2012-13 small game season.

SPECIES	Mean days	Mean harvest	Harvest/day	Proportion of effort (days)	Proportion of the harvest
Ring-necked pheasants (N=628)					
Oct. 31- Nov. 8	1.87	1.47	0.79	30%	38%
Nov. 9- Nov. 30	2.56	1.33	0.52	41%	34%
Dec. 1- Jan. 10	1.89	1.06	0.56	30%	27%
Jan. 11- Jan 31	-	-	-	-	-
Bobwhite quail (N=86)					
Oct. 31- Nov. 8	1.54	0.48	0.31	26%	25%
Nov. 9- Nov. 30	2.21	0.57	0.26	37%	30%
Dec. 1- Jan. 10	1.99	0.76	0.38	33%	39%
Jan. 11- Jan 31	0.28	0.13	0.46	5%	7%

Table 5. Harvest and proportion of harvest by August roadside survey region for the 2012-13 small game season^a.

REGION	Ring-necked Pheasant		Bobwhite Quail		Cottontail Rabbit		Squirrel		Hungarian Partridge		Mourning Dove	
	N	%	N	%	N	%	N	%	N	%	N	%
NW	33,239	21.0%	23	0.1%	3,464	4.9%	3,053	1.9%	75	12.3%	6,309	6.7%
NC	20,413	12.9%		0.0%	4,270	6.1%	5,487	3.5%	207	33.9%	6,891	7.3%
NE	9,157	5.8%	182	0.9%	14,427	20.6%	50,747	32.0%		0.0%	4,392	4.6%
WC	13,215	8.4%	26	0.1%	1,992	2.8%	1,537	1.0%		0.0%	1,866	2.0%
C	26,470	16.7%	381	1.9%	7,368	10.5%	16,165	10.2%	155	25.4%	14,528	15.3%
EC	10,909	6.9%	75	0.4%	15,341	21.9%	31,888	20.1%	23	3.8%	23,436	24.7%
SW	11,926	7.5%	6,779	33.1%	6,483	9.3%	12,306	7.8%		0.0%	13,713	14.5%
SC	9,233	5.8%	6,220	30.4%	4,501	6.4%	9,359	5.9%		0.0%	4,185	4.4%
SE	2,653	1.7%	5,734	28.0%	10,046	14.4%	19,935	12.6%		0.0%	17,375	18.3%
Nonresident	20,884	13.2%	1,054	5.1%	2,111	3.0%	8,138	5.1%	151	24.7%	2,169	2.3%
Total	158,099		20,474		70,003		158,615		611		94,864	

^a County of residence is used to assign location, which may not be where person hunted.